Practice: 462 - Precision Land Forming

Scenario: #1 - Minor Shaping

Scenario Description:

The land surface is shaped or leveled to a specific elevation and grade for various land uses. Cuts and fills are small. The resource concerns are EXCESS / INSUFFICIENT WATER -(Ponding, Flooding) and SOIL EROSION -(Sheet, Rill)

Before Situation:

The field has minor topographic issues or problems with surface drainage or erosion which can be corrected without land leveling or land smoothing. Site conditions require attention to elevation and grade. Typical situation is a 5 acre field. Material to be moved and or placed typically around 100 cubic yards per acre.

After Situation:

Land has been shaped to the required elevations and grades. Resource concerns have been treated. Associated practices, like plantings or drainage water management practices, would be contracted separately as needed.

Scenario Feature Measure: Acres of land treated

Scenario Unit: Acre
Scenario Typical Size: 5

Scenario Cost: \$2,290.56 Scenario Cost/Unit: \$458.11

Cost Details (by category):									
Component Name	ID	Component Description	Unit	(\$/unit)	Quantity	Cost			
Equipment/Installation									
Skidsteer, 80 HP		Skidsteer loader with horsepower range of 60 to 90. Equipment and power unit costs. Labor not included.	Hour	\$46.33	6	\$277.98			
Scraper, pull, 7 CY		Pull type earthmoving scraper with 7 CY capacity. Does not include pulling equipment or labor. Add Tractor or Dozer, 160 HP typically required for single scraper.	Hour	\$16.64	6	\$99.84			
Dozer, 140 HP	927	Track mounted Dozer with horsepower range of 125 to 160. Equipment and power unit costs. Labor not included.	Hour	\$133.49	6	\$800.94			
Labor									
Equipment Operators, Light		Includes: Skid Steer Loaders, Hydraulic Excavators <50 HP, Trenchers <12", Ag Equipment <150 HP, Pickup Trucks, Forklifts, Mulchers	Hour	\$19.19	6	\$115.14			
Equipment Operators, Heavy		Includes: Cranes, Hydraulic Excavators >=50 HP, Dozers, Paving Machines, Rock Trenchers, Trenchers >=12", Dump Trucks, Ag Equipment >=150 HP, Scrapers, Water Wagons.	Hour	\$27.70	6	\$166.20			
Mobilization	•		•		•				
Mobilization, medium equipment	1139	Equipment with 70-150 HP or typical weights between 14,000 and 30,000 pounds.	Each	\$276.82	3	\$830.46			

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Scenario: #2 - Site Stabilization

Scenario Description:

The site contains a gully or other site specific topographic problem. Site conditions require attention to elevation and grade. Resource concerns are EXCESS / INSUFFICIENT WATER -(Ponding, Flooding) and SOIL EROSION -(Sheet, Rill)

Before Situation:

The site, commonly a crop field or CAFO, has localized gully or topographic issues causing drainage or erosion problems. Typical situation is a gully 10 feet wide and 5 feet deep.

After Situation:

Land has been shaped to the required elevations and grades. Resource concerns have been treated. Associated practices, like plantings or drainage water management practices, would be contracted separately as needed.

Scenario Feature Measure: Cubic yards of material placed

Scenario Unit: Cubic Yard Scenario Typical Size: 6,000

Scenario Cost: \$14,016.82 Scenario Cost/Unit: \$2.34

Cost Details (by categor	y):			Price		
Component Name	ID	Component Description	Unit	(\$/unit)	Quantity	Cost
Equipment/Installation						
Excavation, Common Earth, side cast, small equipment		Bulk excavation and side casting of common earth with hydraulic excavator with less than 1 CY capacity. Includes equipment and labor.	Cubic yard	\$2.29	6000	\$13,740.00
Mobilization						
Mobilization, medium equipment	1139	Equipment with 70-150 HP or typical weights between 14,000 and 30,000 pounds.	Each	\$276.82	1	\$276.82